

## **REMARKS**

Claims 1, 4-7, 9-17, 19, 21, 23, 25-36, 40, 41, 44-50, and 52-59 were pending in the application. All pending claims have been rejected. Claims 1, 52, and 59 have been amended. New claims 60-67 have been added. Claims 1, 4-7, 9-17, 19, 21, 23, 25-36, 40, 41, and 44-67 are now pending in the application. Favorable reconsideration and allowance of the application are respectfully requested.

### **I. Objections to the Drawings**

The drawings are objected to because the claim limitation of “the recess having an inner surface adapted to clamp at least a portion of the surgical instrument to the second member” (recited in claim 59) is alleged in the Office Action as not being shown in the drawings.

Claim 59 has been amended, and Applicant respectfully asserts that all features of claim 59 are shown in the drawings. Claim 59 recites that the clamping member comprises a surface that defines a portion of the through-hole, the surface being adapted to receive a portion of the surgical instrument, and also adapted to clamp at least a portion of the surgical instrument to the second member. Fig. 4 illustrates the clamping member 44 having a surface that defines a portion of the through hole 48.

Withdrawal of the objection to the drawings is respectfully requested.

### **II. Claim Rejections – 35 U.S.C. §112**

Claim 59 is rejected under 35 USC §112 as failing to comply with the enablement requirement. Applicant asserts that claim 59 as amended is both enabled by the specification, and sufficiently described in the specification. For instance, the present application states at Page 10, lines 25-29:

As threaded shaft 52 advances into axial bore 50, clamping member 44 moves downwardly with respect to inner sleeve 42. Since the surgical instrument passes through through-hole 48, as clamping member 44 moves downwardly with respect to inner sleeve 42, the surgical instrument becomes locked between the upper surface of through-hole 48 and upper surface of inner sleeve 42.

Withdrawal of the rejection of claim 59 under 35 U.S.C. §112 is respectfully requested.

### III. Claim Rejections – 35 USC §102

A. Claims 1, 4-7, 9-17, 19, 21, 23, and 25-30 are rejected under 35 U.S.C. §102(b) as being anticipated by Koteles.

Independent claim 1 recites, among other things, a handle, and a coupling mechanism having a knob such that at least a portion of the knob is disposed in the handle.

The Office Action cites Koteles as disclosing a rake plate 22 that provides a handle. The Office Action further identifies a coupling mechanism having a knob 42. However, the knob 42 disclosed by Koteles is not disposed in the rake plate 22. Rather, the knob is carried by a pivot clamp 34 which, in turn, is pivotally connected to the rake plate 22 (see Col. 3, lines 1-7; Fig. 2). The pivot clamp 34 does not provide a handle as recited in claim 1, as the presently claimed handle has a longitudinal axis, proximal and distal ends, and a longitudinally elongate outer surface for being held by an operator. Koteles thus fails to teach or suggest a portion of the knob disposed in the handle, as recited in claim 1. Furthermore, Applicant was unable to identify any teaching or suggestion to position the knob 42 such that the knob is disposed in the rake plate 22.

Moreover, dependent claim 14 recites a second coupling mechanism located on the handle for coupling a second surgical instrument to the handle. If the pivot clamp 34 disclosed by Koteles provides a handle as asserted in the Office Action, then the pivot clamp cannot include first and second coupling mechanisms. Rather, each pivot claim 34 is connected to its own rake 24. While the body 30 is coupled to first and second pivot clamps 34, a portion of the knobs 42 are not disposed in the body 30, but rather are disposed in the pivot clamps 34.

Accordingly, Applicant asserts that claim 1 is allowable over Koteles. Applicant further asserts that the allowability of claim 1 provides sufficient basis for the allowance of corresponding dependent claims 4-7, 9-17, 19, 21, 23, and 25-30. Withdrawal of the rejection of claims 1, 4-7, 9-17, 19, 21, 23, and 25-30 in view of Koteles is respectfully requested.

B. Claims 1, 4-7, 9-13, and 30 are rejected under 35 U.S.C. §102(e) as being anticipated by Scirica.

Independent claim 1 recites, among other things, that the blade member becomes detached from the handle when the coupling element is not received in the bore of the knob.

The Office Action cites Scirica (Figs. 11 and 19) as disclosing a surgical retractor handle 210, and a coupling mechanism 214 including a knob 240 that has a bore. Scirica is also cited as disclosing a blade member having a coupling element (cable 226) that is received in the bore of the knob, such that rotation of the knob in a first direction causes the cable to advance into the bore of the knob (i.e., as the cable is stretched and relaxed).

Applicant notes that the coupling mechanism 214 identified in the Office Action is actually a tension adjusting mechanism as disclosed by Scirica at Paragraph 57. As such, the tension adjusting mechanism 214 does not attach the cable 226 to the articulating arm 110 (identified in the Office Action as handle 110). Rather, Scirica clearly states that the cable 226 has a proximal end that is attached to a movable tension control member 212b and a distal end that is attached to an end effector coupling 228 (see Paragraph 61; Fig. 15). Accordingly, it cannot be said that Scirica's cable 226 becomes detached from the articulating arm 110 when the when the cable is not received in the bore of the knob.

Accordingly, Applicant asserts that claim 1 is allowable over Scirica. Applicant further asserts that the allowability of claim 1 provides sufficient basis for the allowance of corresponding dependent claims 4-7, 9-17, 19, 21, 23, and 25-30. Withdrawal of the rejection of claims 1, 4-7, 9-17, 19, 21, 23, and 25-30 in view of Scirica is respectfully requested.

C. Claims 52-58 are rejected under 35 U.S.C. §102(b) as being anticipated by Furnish.

Independent claim 52 recites, among other things, a handle that is elongate along a longitudinal axis, and a first coupling mechanism that is rotatable about the longitudinal axis.

The Office Action cites Furnish as disclosing a retractor 10 having a handle 76/78/82. The Office Action further identifies a first coupling mechanism 74 rotatable about the longitudinal axis of the handle, and a second coupling mechanism 50. Applicant notes that the structure 76/78/82 is not a handle, but rather is a means for movably mounting a handle

segment 50 of handle 10 to a rib retractor (see Col. 9, lines 13-23). It is therefore element 10/50 that provides a handle, and not the mounting means 76/78/82.

Moreover, even if the structure 76/78/82 identified in Furnish is interpreted to provide a handle, the handle is not elongate about a longitudinal axis, such that the first coupling mechanism is rotatable about the longitudinal axis. For instance, the Office Action identifies the “handle” as having a proximal end 72 and a distal end 76. The “handle” is elongate along an axis that extends between the proximal end 72 and distal end 76. However, neither the first nor the second coupling mechanism is rotatable about the longitudinal axis. The structure identified in the Office Action as a first coupling mechanism 74 is rotatable about an axis that is perpendicular with respect to “handle’s” axis of elongation (See Fig. 1).

Accordingly, Applicant asserts that claim 52 is allowable over Furnish. Applicant further asserts that the allowability of claim 52 provides sufficient basis for the allowance of corresponding dependent claims 53-58. Withdrawal of the rejection of claims 52-58 in view of Furnish is respectfully requested.

D. Claims 52-54 are rejected under 35 U.S.C. §102(b) as being anticipated by Wells.

Independent claim 52 recites, among other things, that the coupling element of the blade member is configured and dimensioned to connect with the first coupling mechanism regardless of whether the surgical instrument is received in the hole of the second coupling mechanism, and the surgical instrument can be received in the hole of the second coupling mechanism regardless of whether the blade member is connected with the first coupling mechanism.

The Office Action cites Wells as disclosing a retractor including a handle 40, a first coupling mechanism 50 coupled to the proximal end of the handle, and a blade member 30 comprising a coupling element 50 connected to the first coupling mechanism. The Office Action further cites Wells as disclosing a second coupling mechanism 28 having a through-hole that is capable of receiving a surgical instrument.

Applicant notes that while the Office Action identifies a blade member 30, Wells discloses a blade member identified by element 20. The “blade member” 30 identified in the Office Action is in fact a retractor and not a blade member as claimed, and as understood by one having ordinary skill in the art (see Col. 3, lines 8-15).

Moreover, Applicant notes that Wells discloses connecting the blade member 20 to the handle 40, and further connecting the retractor 30 to the handle. However, as can be seen at Figs. 2-3, the interior surface 68 of socket 66 engages the upper surface of ball 50, while the lower surface of ball 50 engages proximal end 28 of blade 20. Accordingly, the retractor cannot be attached to the handle 40 unless the blade 20 is also attached to the handle 40.

Wells thus fails to teach or suggest each element recited in claim 52. Accordingly, Applicant asserts that claim 52 is allowable over Wells. Applicant further asserts that the allowability of claim 52 provides sufficient basis for the allowance of corresponding dependent claims 53-54. Withdrawal of the rejection of claims 52-54 in view of Wells is respectfully requested.

#### **IV. Claim Rejections – 35 USC §103**

Claims 31-36, 40-41, and 44-47 are rejected under 35 U.S.C §103(a) as being unpatentable over Greenberg in view of any one of Scirica and Koteles.

In particular, the Office Action alleges that Greenberg discloses each step recited in claim 31, but fails to disclose the retractor as claimed. The Office Action cites Scirica and Koteles as disclosing the retractor as claimed.

The Office Action identifies Fig. 17 of Greenberg as teaching the method steps recited in claim 31. Applicant notes that Greenberg discloses a mandibular retractor (see Col. 5, lines 61-62), and the cited portions of Greenberg relate to a mandibular surgical procedure. Koteles, on the other hand, discloses a surgical retractor 20 including a rake plate 22 having a plurality of rakes 24 for applying retractor force to a body during a performance of surgery in the chest cavity, with particular application for cardiac surgery (see Col. 1, lines 13-16). Scirica discloses a heart stabilizer (see Paragraph 55).

The Office Action makes the broad assertion that the structure disclosed in Scirica or Koteles can be substituted for the structure in Greenberg as a suitable alternative retractor while still obtaining the same end or predictable results. Applicant asserts that a surgical implement designed for heart surgery would not produce the same and/or predictable results in a mandibular surgical procedure when compared to the results obtained using a mandibular retractor for a mandibular surgical procedure.

Accordingly, one having ordinary skill in the art would not replace Greenberg's mandibular surgical implement with the chest surgery implements disclosed in Scirica or Koteles when performing a mandibular surgical procedure.

Withdrawal of the rejection of claims 31-36, 40-41, and 44-47 under 35 U.S.C. §103 is respectfully requested.

#### **V. New Claims**

Applicant has added new claims 60-67.

Claim 60 depends from claim 1, and recites that the handle is elongate along the longitudinal axis. Applicant notes that Koteles fails to teach or suggest a knob that is rotatable about a longitudinal axis, wherein the handle is elongate along the longitudinal axis.

Claim 61 depends from claim 60, and recites that the coupling element is rotatable about the longitudinal axis. Neither Koteles nor Scirica teaches this limitation.

Claim 62 depends from claim 14, and also recites that the handle is elongate along the longitudinal axis.

Claim 63 depends from claim 62, and recites that the longitudinal axis extends through the first coupling mechanism, and the second coupling mechanism is spaced from the longitudinal axis of the handle. Applicant asserts that Koteles fails to teach or suggest a handle that is elongate about a longitudinal axis, a first coupling mechanism positioned such that the longitudinal axis extends through the first coupling mechanism, and a second coupling mechanism spaced from the longitudinal axis of the handle.

Claim 64 depends from claim 31, and recites that the blade member becomes detached from the handle when the coupling element is not received in the bore of the knob. As discussed above with respect to claim 1, Scirica fails to teach or suggest this claim limitation.

Claim 65 depends from claim 31 and recites that retractor further comprises a second coupling mechanism located on the handle for coupling the endoscope to the handle. Applicant asserts that neither Koteles nor Scirica teaches or suggests this claim limitation.

Claim 66 is independent, and recites that the blade member is external to the handle. Applicant notes that the cable 226 in Scirica is internal with respect to the handle. Additionally, as discussed above with respect to claim 1, Koteles fails to teach or suggest a

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coupling mechanism coupled to the proximal end of the handle, wherein the first coupling mechanism comprises a knob having a bore, wherein at least a portion of the knob is disposed within the handle.

New claim 67 depends from claim 66, and recites a second coupling mechanism located on the handle for coupling a second surgical instrument to the handle.

Formal allowance of claims 60-67 is respectfully requested.

## **VI. Conclusion**

Applicant therefore asserts that each objection and rejection to the claims has been overcome, and a notice of allowance is earnestly solicited. The Examiner is hereby authorized to contact the undersigned at the telephone number appearing below if such would advance the prosecution of this application.

The Commissioner is hereby authorized to withdraw the \$636 fee for the addition of one independent claim greater than three (\$220) and the addition of eight claims greater than twenty (\$416), along with any additional fees deemed due for this or any other communication, from Deposit Account No. 23-3050.

Respectfully submitted,

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